

ABSTRACT OF THE DISCLOSURE

Various embodiments of the present invention provide for immediate
5 allocation of virtual memory on behalf of processes running within a computer system. One
or more bit flags within each translation indicate whether or not a corresponding virtual
memory page is immediate. READ access to immediate virtual memory is satisfied by
hardware-supplied or software-supplied values. WRITE access to immediate virtual memory
raises an exception to allow an operating system to allocate physical memory for storing
10 values written to the immediate virtual memory by the WRITE access.